

## ADP125ARHZ-R7

Data Sheet

5.5V INPUT, 500 MA, LOW QUIESCENT CURRENT, CMOS LINEAR REGULATOR W/EXTERNAL VOLTAGE DIVIDER No of Pins: 8 Temperature Range: Ind

Manufacturers <u>Analog Devices, Inc</u>

Package/Case SOIC-8

Product Type Power Management ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for ADP125ARHZ-R7 or <a href="mailto:sales@ovaga.com">Fmailto:sales@ovaga.com</a> We will contact you in 12 hours.

**RFO** 

## **General Description**

The ADP124/ADP125 are low quiescent current, low dropout linear regulators. They are designed to operate from an input voltage between 2.3 V and 5.5 V and to provide up to 500 mA of output current. The low 130 mV dropout voltage at a 500 mA load improves efficiency and allows operation over a wide input voltage range.

The low 210  $\mu$ A of quiescent current with a 500 mA load makes the ADP124/ADP125 ideal for battery-operated portable equipment. The ADP124 is capable of 31 fixed-output voltages from 1.75 V to 3.3 V. The ADP125 is the adjustable version of the device and allows the output voltage to be set between 0.8 V and 5.0 V by an external voltage divider. The ADP124/ADP125 are specifically designed for stable operation with tiny 1  $\mu$ F ceramic input and output capacitors to meet the requirements of high performance, space constrained applications.

The ADP124/ADP125 have an internal soft start that gives a constant start-up time of 350  $\mu$ s. Short-circuit protection and thermal overload protection circuits prevent damage in adverse conditions. The ADP124/ADP125 are available in an 8-lead exposed paddle MSOP package. When compared with the standard MSOP package, the exposed paddle MSOP package has lower thermal resistance ( $\theta$ JA). The lower thermal resistance package allows the ADP124/ADP125 to meet the needs of a variety of portable applications while minimizing the rise in junction temperature.

**Features** 

Input voltage supply range: 2.3 V to 5.5 V

500 mA maximum output current

Fixed and adjustable output voltage versions

1% initial accuracy

Up to 31 fixed-output voltage options available from  $1.75~\mathrm{V}$  to  $3.3~\mathrm{V}$ 

Adjustable-output voltage range from  $0.8\ V$  to  $5.0\ V$ 

Very low dropout voltage: 130 mV

Low quiescent current: 45 µA

Low shutdown current:  $<1~\mu A$ 

Excellent PSRR performance: 60 dB at 100 kHz

Excellent load/line transient response

See data sheet for additional features

## **Application**

Digital camera and audio devices

Portable and battery-powered equipment

Automatic meter reading (AMR) meters

GPS and location management units

Medical instrumentation

Point of load power

## **Related Products**



ADP3336ARMZ-REEL7

Analog Devices, Inc

MSOP-8



ADP3367ARZ

Analog Devices, Inc

SOIC-8



ADP3330ARTZ3.3-RL7

Analog Devices, Inc

SOT-23-6



ADR421ARZ

Analog Devices, Inc

SOP-8



AD737JRZ

Analog Devices, Inc

SOP-8



**AD636JH** 

Analog Devices, Inc

TO-100-10



ADR434BRZ

Analog Devices, Inc

SOIC-8



ADR3412ARJZ-R7

Analog Devices, Inc

SOT-23-6